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(54) Title: IMPROVEMENTS IN OR RELATING TO BARRIER MATERIAL

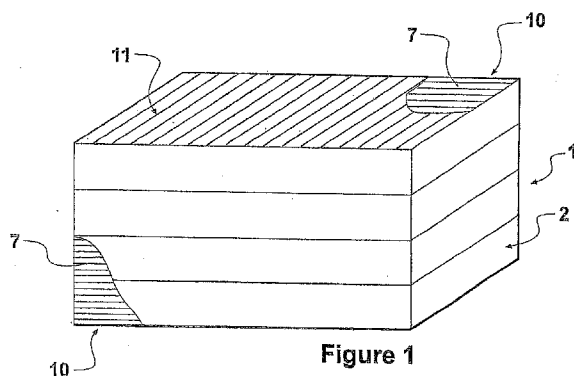


Figure 1

(57) Abstract: The invention consists in a barrier material comprising a substrate of a foamed material with at least one layer of tape or sheet material adhered to the substrate. The tape or sheet has filaments therein which are preferably parallel filaments. The invention has many uses including a crowd barrier, pre-fabricated cubicle, an underlay, a soft barrier, a cable covering, a superstructure support, boxing, a shield, and a mattress or bed stabiliser.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/NZ2007/000301

A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl.

B32B 5/18 (2006.01)**B32B 5/22** (2006.01)**B32B 27/00** (2006.01)

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

DWPI IPC **B32B 5/18/IC**, **B32B 5/22/IC**, **B32B 27/00/IC** and Keywords (FOAM+, POROUS, POLYSTYRENE, TAPE+, SHEET+, FILM+, REINFORC+, FIBER+, FIBRE+, FILAMENT+, LAMINATE+, UNIDIRECTION+, PARALLEL+); DWPI IPC **B32B 027/IC** and Keywords (FOAM, +STYRENE, HONEYCOMB, UNIDIRECTION+, LONGITUDINAL+, ORIENT+, AXIAL+, REINFORC+, PARALLEL, , WIRE?, STRAND?, FIBER?, FIBRE?, FILAMENT, CORE, BLOCK, SUBSTRATE, TENSILE, STRENGTH); ESP@CENET and Keywords (FOAM, CORE, FILAMENT, LAMINATE, TAPE, SHEET); GOOGLE PATENTS and Keywords (FOAM, CORE, FILAMENT, LAMINATE, TAPE, SHEET, SUBSTRATE, FACING)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*		Relevant to claim No.
E, X	US 2007/0299383 A1 (MURPHY ET AL.) 12 December 2007 Column 3 paragraph [0030] – [0031] and figure 2	1, 3
X	US 5333857 A (LALLEMAND) 2 August 1994 Column 3 lines 16 – 46 and figures 2 – 3	1, 3
A	US 5001005 A (BLANPIED) 19 March 1991	
A	US 4292363 A (BRIGGS) 29 September 1981	



Further documents are listed in the continuation of Box C



See patent family annex

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search
08 May 2008

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26 MAY 2008

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/NZ2007/000301

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: **2, 4 - 18**
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

See Continuation Sheet.
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

See Continuation Sheet.

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/NZ2007/000301

Supplemental Box

(To be used when the space in any of Boxes I to IV is not sufficient)

Continuation of Box No: II

The International Searching Authority (ISA) has determined under Articles 17(2)(a)(ii) that the claims do not comply with the requirements of Article 6 to the extent that, except as indicated below, a meaningful search cannot be carried out. In particular, claims 2 and 8 - 18 in their present form are too broad or vague to be searched. Claims 1 - 7 are directed to barrier material comprising a substrate of a foamed material, the substrate thereon, therein or both at least one layer of tape or sheet material adhered in or to the substrate, the tape or sheet having filaments therein. Claim 8 is directed to a substrate formed of polystyrene material. Claim 9 is directed to crowd barrier. Claim 10 is directed to a pre-fabricated cubicle. Claim 11 is directed to an underlay. Claim 12 is directed to a soft barrier. Claims 13 and 14 are directed to a cable covering. Claim 15 is directed to a superstructure support. Claim 16 is directed to a boxing. Claim 17 is directed to a shield. Claim 18 is directed to a mattress or a bed stabiliser.

Please note, in correspondence with the attorney it was indicated that only claim 1 and 3 were to be searched.

Supplemental Box

(To be used when the space in any of Boxes I to VIII is not sufficient)

Continuation of Box No: III

The International application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept.

In assessing whether there is more than one invention claimed, I have given consideration to those features which can be considered to potentially distinguish the claimed combination of features from the prior art. Where different claims have different distinguishing features they define different inventions.

This International Searching Authority has found that there are different inventions as follows:

1. Claims 1 – 7 are directed to a barrier material comprising a substrate of a foamed material, the substrate thereon, therein or both at least one layer of tape or sheet material adhered in or to the substrate, the tape or sheet having filaments therein. It is considered that the above feature comprises a first distinguishing feature.
2. Claim 8 is directed to a substrate formed of polystyrene material. It is considered that the above feature comprises a second distinguishing feature.
3. Claim 9 is directed to crowd barrier. It is considered that the above feature comprises a third distinguishing feature.
4. Claim 10 is directed to a pre-fabricated cubicle. It is considered that the above feature comprises a fourth distinguishing feature.
5. Claim 11 is directed to an underlay. It is considered that the above feature comprises a fifth distinguishing feature.
6. Claim 12 is directed to a soft barrier. It is considered that the above feature comprises a sixth distinguishing feature.
7. Claim 13 and 14 are directed to a cable covering. It is considered that the above feature comprises a seventh distinguishing feature.
8. Claim 15 is directed to a superstructure support. It is considered that the above feature comprises a eighth distinguishing feature.
9. Claim 16 is directed to a boxing. It is considered that the above feature comprises a ninth distinguishing feature.
10. Claim 17 is directed to a shield. It is considered that the above feature comprises a tenth distinguishing feature.
11. Claim 18 is directed to a mattress or a bed stabiliser. It is considered that the above feature comprises an eleventh distinguishing feature.

PCT Rule 13.2, first sentence, states that unity of invention is only fulfilled when there is a technical relationship among the claimed inventions involving one or more of the same or corresponding special technical features. PCT Rule 13.2, second sentence, defines a special technical feature as a feature which makes a contribution over the prior art.

Each of the abovementioned groups of claims has a different distinguishing feature and they do not share any feature which could satisfy the requirement for being a special technical feature. Because there is no common special technical feature it follows that there is no technical relationship between the identified inventions. Therefore the claims do not satisfy the requirement of unity of invention *a priori*.

Information on patent family members

PCT/NZ2007/000301

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report				Patent Family Member			
US	2007299383	US	2008014386	US	2008014387	WO	2007143089
US	5333857	CA	2086470	CH	686227	EP	0597166
		FI	925902	JP	6198010		
US	5001005	US	5102728	US	5112678		
US	4292363	CA	1130714	DK	178680	EP	0019998

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

END OF ANNEX